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- NEWS 7 JUL 09 PATDPAFULL adds Simultaneous Left and Right Truncation (SLART) to AB, CLM, MCLM, and TI fields
- NEWS 8 JUL 14 USGENE enhances coverage of patent sequence location (PSL) data
- NEWS 9 JUL 27 CA/CAplus enhanced with new citing references
- NEWS 10 JUL 16 GBFULL adds patent backfile data to 1855
- NEWS 11 JUL 21 USGENE adds bibliographic and sequence information
- NEWS 12 JUL 28 EPFULL adds first-page images and applicant-cited references
- NEWS 13 JUL 28 INPADOCDB and INPAFAMDB add Russian legal status data
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FILE LAST UPDATED: 17 Aug 2009 (20090817/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009
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62 SGBS

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=> s (glypican-3 or GPC3 or DGSX or GTR2-2 or MXR7 or OCI5 or SDYS or SGB or
SGBS or SGBS1) and melanoma
     731 GLYPICAN
     352 GLYPICANS
     791 GLYPICAN
        (GLYPICAN OR GLYPICANS)
   7705968 3
     310 GLYPICAN-3
        (GLYPICAN(W)3)
     283 GPC3
      0 DGSX
     24 GTR2
   10178478 2
      3 GTR2-2
        (GTR2(W)2)
      11 MXR7
      7 OCI5
      1 SDYS
     251 SGB
     62 SGBS
     307 SGB
        (SGB OR SGBS)
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3 SGBS1
    42855 MELANOMA
    4189 MELANOMAS
     19 MELANOMATA
    43425 MELANOMA
        (MELANOMA OR MELANOMAS OR MELANOMATA)
L1
      50 (GLYPICAN-3 OR GPC3 OR DGSX OR GTR2-2 OR MXR7 OR OCI5 OR
SDYS
       OR SGB OR SGBS OR SGBS1) AND MELANOMA
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       50 DUPLICATE REMOVE L1 (0 DUPLICATES REMOVED)
=> s L2 (S) (diagnos? or assay? or measur? or detect?)
      50 S L2
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L3 (S) '
   363581 DIAGNOS?
   655862 ASSAY?
   3406766 MEASUR?
   2007938 DETECT?
L4
      30 L3 (S) (DIAGNOS? OR ASSAY? OR MEASUR? OR DETECT?)
=> s (glypican-3 or GPC3 or DGSX or GTR2-2 or MXR7 or OCI5 or SDYS or SGB or
SGBS or SGBS1) (S) melanoma
     731 GLYPICAN
     352 GLYPICANS
     791 GLYPICAN
        (GLYPICAN OR GLYPICANS)
   7705968 3
     310 GLYPICAN-3
        (GLYPICAN(W)3)
     283 GPC3
      0 DGSX
     24 GTR2
   10178478 2
      3 GTR2-2
        (GTR2(W)2)
     11 MXR7
      7 OCI5
      1 SDYS
     251 SGB
     62 SGBS
     307 SGB
        (SGB OR SGBS)
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62 SGBS

3 SGBS1

42855 MELANOMA

4189 MELANOMAS

19 MELANOMATA

43425 MELANOMA

(MELANOMA OR MELANOMAS OR MELANOMATA)

L5 20 (GLYPICAN-3 OR GPC3 OR DGSX OR GTR2-2 OR MXR7 OR OCI5 OR SDYS

OR SGB OR SGBS OR SGBS1) (S) MELANOMA

=> duplicate remove L5

PROCESSING COMPLETED FOR L5

L6 20 DUPLICATE REMOVE L5 (0 DUPLICATES REMOVED)

=> s L6 (S) (DIAGNOS? OR ASSAY? OR MEASUR? OR DETECT?)

L7 20 S L6

363581 DIAGNOS?

655862 ASSAY?

3406766 MEASUR?

2007938 DETECT?

L8 9 L7 (S) (DIAGNOS? OR ASSAY? OR MEASUR? OR DETECT?)

=> d L8 bib abs 1-9

# L8 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2009:216149 CAPLUS

DN 151:144580

TI Glypican-3: A Novel Diagnostic Marker for Hepatocellular Carcinoma and More

AU Kandil, Dina H.; Cooper, Kumarasen

CS Department of Pathology, University of Vermont, Burlington, VT, 05401, USA

SO Advances in Anatomic Pathology (2009), 16(2), 125-129

CODEN: AAPDCK; ISSN: 1072-4109

PB Lippincott Williams & Wilkins

DT Journal; General Review

LA English

AB A review. Glypican-3 (GPC3) is a heparan sulfate proteoglycan that plays an important role in cell growth and differentiation. GPC3 function is tissue dependent. In some tissues, GPC3 acts as a tumor suppressor gene, whereas in others, it acts as an oncofetal protein. Studies have shown that GPC3 is a reliable marker for hepatocellular carcinoma. The sensitivity and specificity exceeds both .alpha.-fetoprotein and hepatocyte-paraffin1. GPC3 immunohistochem. can aid in the differentiation of testicular germ cell tumors, being expressed in all yolk sac tumors but not in seminomas. GPC3 expression has also been

identified in some squamous cell carcinomas of the lung and clear cell carcinomas of the ovary. The role of GPC3 in melanomas is still controversial. This article reviews the current information on the application of GPC3 immunostaining in surgical pathol. and cytol.

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD

#### ALL CITATIONS AVAILABLE IN THE RE FORMAT

# L8 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:407710 CAPLUS

DN 146:375330

TI Cancer metastasis diagnosis method, and therapeutic drug

IN Oguchi, Masao; Ishii, Keisuke

PA Perseus Proteomics Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 18pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

AB Provided is a method for diagnosing cancer selected from Ewing's sarcoma primary nest, Ewing's sarcoma metastasis tissue, melanoma metastasis tissue and hepatic carcinoma metastasis tissue. The diagnostic method is characterized in that it comprises detecting GPC3 protein in a test sample (e.g., blood, blood serum, blood plasma) by an immunoassay using an anti-GPC3 antibody. Also provided is a diagnostic agent or therapeutic drug for metastatic cancer selected from Ewing's sarcoma primary nest, Ewing's sarcoma metastasis tissue, melanoma metastasis tissue and hepatic carcinoma metastasis tissue, which is characterized in that it containes resp. a GPC3 protein detection reagent contg. an anti-GPC3 antibody, or an anti-GPC3 antibody.

## L8 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:383728 CAPLUS

DN 144:431112

TI Anti-SPARC and anti-glypican-33 antibodies and test kits for diagnosis of hepatic cancer and melanoma

IN Nishimura, Yasuharu; Nakatsura, Tetsuya; Ikuta, Yoshiaki

PA Kumamoto University, Japan

SO PCT Int. Appl., 24 pp.

**CODEN: PIXXD2** 

DT Patent

LA Japanese FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

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PI WO 2006043362 A1 20060427 WO 2005-JP14567 20050809 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

20081212

AU 2005297303 A1 20060427 AU 2005-297303 20050809 EP 1813943 A1 20070801 EP 2005-770440 20050809

US 20090111095 A1 20090430 US 2008-577435

PRAI JP 2004-303688 A 20041019

ZA, ZM, ZW

R: DE, FR, GB

WO 2005-JP14567 W 20050809

AB It is intended to find another tumor marker useful for the early diagnosis of melanoma and to provide, utilizing the same, a diagnostic kit for malignant melanoma and method of diagnosis therefor. There is provided a diagnostic kit for malignant melanoma, comprising an antibody against SPARC and an antibody against GPC3.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

#### ALL CITATIONS AVAILABLE IN THE RE FORMAT

## L8 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:39388 CAPLUS

DN 144:228826

TI Melanoma antigen gene family D 1 protein as hepatocarcinoma marker and its application in cancer diagnosis

IN Wan, Dafang; Gu, Jianren; Yang, Shengli

PA Shanghai New World Gene Technology Development Co., Ltd., Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 22 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI CN 1629637 A 20050622 CN 2003-10109398 20031215

CN 1281962 C 20061025

PRAI CN 2003-10109398 20031215

AB This invention relates to melanoma antigen gene family D1 protein (MAGFD1) as hepatocarcinoma marker, test kit and protein chip contg. anti-MAGED1 specific antibody for diagnosing hepatocarcinoma. The protein chip can also contains antibodies against other antigens, such as pTEN, p21, p27, p73, p53, Rb1, APC, nm23, P16, MXR7, IGF-II, TGF.alpha., HGF-R, c-erbB-1, Ras, Raf, c-myc and c-ets-2. This invention also describes medicine contg. antagonist of MAGFD1 and pharmaceutically acceptable carriers.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

# L8 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1234417 CAPLUS

DN 144:251411

TI Highly Sensitive Detection of Melanoma at an Early Stage Based on the Increased Serum Secreted Protein Acidic and Rich in Cysteine and Glypican-3 Levels

- AU Ikuta, Yoshiaki; Nakatsura, Tetsuya; Kageshita, Toshiro; Fukushima, Satoshi; Ito, Shosuke; Wakamatsu, Kazumasa; Baba, Hideo; Nishimura, Yasuharu
- CS Department of Immunogenetics, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan
- SO Clinical Cancer Research (2005), 11(22), 8079-8088 CODEN: CCREF4; ISSN: 1078-0432
- PB American Association for Cancer Research

DT Journal

LA English

AB PURPOSE: There are no available tumor markers detecting primary melanoma at an early stage. The identification of such serum markers would be of significant benefit for an early diagnosis of melanoma. We recently identified glypican-3 (GPC3) as a novel tumor marker but could diagnose only 40% of melanomas. Thereby, we focused out attention on secreted protein acidic and rich in cysteine (SPARC) overexpressed in melanoma as another candidate for tumor marker. Exptl. Design: Secreted SPARC protein was quantified using ELISA in the sera from 109 melanoma patients, five patients with large congenital melanocytic nevus, 61 age-matched healthy donors, and 13 disease-free patients after undergoing a surgical removal. We also quantified GPC3 and 5-S-cysteinyldopa in the same serum samples and compared these markers for their diagnostic value. RESULTS: The serum SPARC concns. in melanoma patients were greater than those in healthy donors (P = 0.001). When we fixed a cutoff value at the mean concn. plus

2 SD of the healthy donors, the serum SPARC was found to have increased in the sera of 36 of the 109 (33%) melanoma patients, whereas there were three (4.9%) false-pos. cases of 61 healthy donors. Surprisingly, 19 of 36 patients showing increased SPARC levels were in stages 0 to II. The serum SPARC level decreased under the cutoff level in 10 of 13 patients after surgical removal. Using SPARC and GPC3 in combination thus enabled us to diagnose 47 of 75 (66.2%) melanoma patients at an early stage (0-II). CONCLUSIONS: SPARC or its combination with GPC3 is thus considered a potentially useful tumor marker, esp. for melanoma at an early stage.

OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD

# ALL CITATIONS AVAILABLE IN THE RE FORMAT

# L8 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:448336 CAPLUS

DN 143:170230

TI Usefulness of the novel oncofetal antigen glypican-3 for diagnosis of hepatocellular carcinoma and melanoma

AU Nakatsura, Tetsuya; Nishimura, Yasuharu

CS Department of Immunogenetics, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan

SO BioDrugs (2005), 19(2), 71-77

CODEN: BIDRF4; ISSN: 1173-8804

PB Adis International Ltd.

DT Journal; General Review

LA English

AB A review. Discussed are: novel strategies for identification of tumor-assocd. antigens; identification and expression of glypican (GPC)-3 in hepatocellular carcinoma and melanoma; detection of GPC-3 in patients; and known biol. properties of GPC-3.

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

## L8 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:395015 CAPLUS

DN 142:426401

TI Diagnostic agent for malignant melanoma

IN Nishimura, Yasuharu; Nakatsura, Tetsuya

PA Kumamoto Technology & Industry Foundation, Japan

SO PCT Int. Appl., 26 pp.

**CODEN: PIXXD2** 

DT Patent LA Japanese FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

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PI WO 2005039380 A2 20050506 WO 2004-JP16374 20041028 WO 2005039380 A3 20050630

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2004283614 A1 20050506 AU 2004-283614 20041028 EP 1684076 A2 20060726 EP 2004-793354 20041028 EP 1684076 B1 20081231

R: CH, DE, FR, GB, LI, NL

CN 1894587 A 20070110 CN 2004-80032204 20041028 US 20080044818 A1 20080221 US 2007-577343 20070305

PRAI JP 2003-368725 A 20031029 WO 2004-JP16374 W 20041028

AB A novel and clin. useful diagnostic agent for malignant melanoma. There is provided a diagnostic agent for malignant melanoma, comprising an antibody against GPC3, or a primer or probe capable of detecting the expression of GPC3.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2004:1150198 CAPLUS

DN 142:278355

TI Mouse homologue of a novel human oncofetal antigen, glypican-3, evokes T-cell-mediated tumor rejection without autoimmune reactions in mice

AU Nakatsura, Tetsuya; Komori, Hiroyuki; Kubo, Tatsuko; Yoshitake, Yoshihiro; Senju, Satoru; Katagiri, Toyomasa; Furukawa, Yoichi; Ogawa, Michio; Nakamura, Yusuke; Nishimura, Yasuharu

CS Departments of Immunogenetics, Kumamoto University, Kumamoto, Japan

SO Clinical Cancer Research (2004), 10(24), 8630-8640

CODEN: CCREF4; ISSN: 1078-0432

PB American Association for Cancer Research

DT Journal

LA English

AB The authors recently identified glypican-3 (GPC3) overexpressed specifically in human hepatocellular carcinoma, as based on cDNA microarray anal. of 23,040 genes, and the authors reported that GPC3 is a novel tumor marker for human hepatocellular carcinoma and melanoma. GPC3, expressed in almost all hepatocellular carcinomas and melanomas, but not in normal tissues except for placenta or fetal liver, is a candidate of ideal tumor antigen for immunotherapy. In this study, the authors attempted to identify a mouse GPC3 epitope for CTLs in BALB/c mice, and for this, the authors set up a preclin. study to investigate the usefulness of GPC3 as a target for cancer immunotherapy in vivo. The authors identified a mouse GPC3-derived and Kd- restricted CTL epitope peptide in BALB/c mice. Inoculation of this GPC3 peptide-specific CTL into s.c. Colon26 cancer cells transfected with mouse GPC3 gene (C26/GPC3) led to rejection of the tumor in vivo, and i.v. inoculation of these CTLs into sublethally irradiated mice markedly inhibited growth of an established s.c. tumor. Inoculation of bone marrow-derived dendritic cells pulsed with this peptide prevented the growth of s.c. and splenic C26/GPC3 accompanied with massive infiltration of CD8+ T cells into tumors. Evidence of autoimmune reactions was never obsd. in surviving mice that had rejected tumor cell challenges. The authors found the novel oncofetal protein GPC3 to be highly immunogenic in mice and elicited effective antitumor immunity with no evidence of autoimmunity. GPC3 is useful not only for diagnosis of hepatocellular carcinoma and melanoma but also for possible immunotherapy or prevention of these tumors.

OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD

#### ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2004:827193 CAPLUS

DN 142:4152

TI Identification of glypican-3 as a novel tumor marker for melanoma

AU Nakatsura, Tetsuya; Kageshita, Toshiro; Ito, Shosuke; Wakamatsu, Kazumasa; Monji, Mikio; Ikuta, Yoshiaki; Senju, Satoru; Ono, Tomomichi; Nishimura, Yasuharu

CS Department of Immunogenetics, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan

SO Clinical Cancer Research (2004), 10(19), 6612-6621

CODEN: CCREF4; ISSN: 1078-0432

PB American Association for Cancer Research

DT Journal

LA English

AB The authors reported recently the novel tumor marker glypican-3 (GPC3) for hepatocellular carcinoma. In the present study, the authors investigated the expression of GPC3 in human melanoma cell lines and tissues and asked whether GPC3 could be a novel tumor marker for melanoma. Expression of GPC3 mRNA and protein was investigated in human melanoma cell lines and tissues using reverse transcription-PCR and immunohistochem. anal. Secreted GPC3 protein was quantified using ELISA in culture supernatants of melanoma cell lines and in sera from 91 patients with melanoma and 28 disease-free patients after surgical removal of primary melanoma. All of the subjects were Japanese nationals. In >80% of melanoma and melanocytic nevus, there was evident expression of GPC3 mRNA and protein. Furthermore, GPC3 protein was evidenced in sera of 39.6% (36 of 91) of melanoma patients but not in sera from subjects with large congenital melanocytic nevus (0 of 5) and from healthy donors (0 of 60). Twenty-seven of 36 serum GPC3-pos. patients were neg. for both serum 5-S-cysteinyldopa and melanoma-inhibitory activity, well-known tumor markers for melanoma. The pos. rate of serum GPC3 (39.6%) was significantly higher than that of 5-S-cysteinyldopa (26.7%) and of melanoma-inhibitory activity (20.9%). Surprisingly, the authors detected serum GPC3 even in patients with stage 0 in situ melanoma. The pos. rate of serum GPC3 at stage 0, I, and II (44.4%, 40.0%, and 47.6%) was significantly higher than that of 5-S-cysteinyldopa (0.0%, 8.0%, and 10.0%). Also obsd. was the disappearance of GPC3 protein in sera from 11 patients after surgical removal of the melanoma. GPC3 is apparently a novel tumor marker useful for the diagnosis of melanoma, esp. in early stages of the disorder.

OSC.G 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT